Theriogenology 2010

Please answer ONLY SIX of the following questions including the FIRST ONE:

1. **Freezing** and **thawing** of cattle embryos.
2. **Causes** and overcoming of abnormal circling motility of bull spermatozoa.
3. **Mechanism** by which the hardly crystallized substance acting in the processed semen.
4. **Calculate** the dilution rate and the number of cows could be inseminated in different forms of frozen semen. (Individual motility = 70%, ejaculate volume = 6 ml, S.C.C. = 800x10)
5. **Determination** of fructolysis index of bull semen.
6. **Enumerate** three abnormal cells as well as three main causes of alkalinity of bull semen sample.
7. **Sources** symptoms and Sequelle on future fertility with line of prevention and treatment of postmortem infection in cows.
8. Involution of genitalia after parturition is very important for future conception rate. **Discuss** and **mention** the factors affecting uterine involution.

Theriogenology 2011

A. Define:

- Teasing.
- Fructolysis index.
- Medusa cells.
- Cold shock,
- Uterine rugae.

B. Discuss:

a: Peurperium in Bitch.
b. Amputation of uterus in a cow.
c. Fructose in bull semen.
d. Criteria of selection of donor and recipient animals for ET.
e. Role of epididymis in ripening of sperms.

C. How can you prevent:

a. Incomplete ejaculation in bull.
b. Death of sperms in a collected semen sample kept at room temperature to be used for three days.
c. Risks on semen when using milk as a diluent.
d. Uterine prolapse in cow.
e. Secondary abnormalities of bull sperms.

Theriogenology 2012

A. **Define the following:**

a. Ovarian rebound
b. RFM
c. Foaling heat
d. Autoimmune orchitis
e. Acrosome.

B. Yesterday, you received a call from a dairy herd breeder. He was very sad and worried. He said" I have three high producing dairy. These cows showed purulent discharge at 3rd day (1st cow), 15th day (2nd cow) and 25th day (3rd cow) post calving. I don't know the cause of this problem or prevention. Please could you visit me? **What are your answers in the dialogue? What is the problem in each cow? How can you manage such problem? Why was breeder sad?**

C. Is plasmalogen important and enough? **Discuss**

D. **Discuss fully** factors affecting metabolic activity of spermatozoa

E. **Tabulate** advantages and disadvantages of straw, ampoule and pellet methods for freezing of semen.

F. All embryos should be individually examined for cell stage development and quality. **Explain.**

Theriogenology 2014

Please answer the following questions

1. How can you make clinical assessment of a normal parturient cow 7th day postpartum?

2. Floss can if you deal with a case of uterine prolapse in a cow?

3. Discuss briefly the microscopic picture of cold shocked bull semen and prevention of such problem.

4. Enumerate with brief comment- the chemical characters of hull seminal plasma.

5. Discuss fully non-surgical recovery of embryos from a cow.

Theriogenology 2015

Please answer the following questions:

A. Write short notes on:

1. Factors adversely affecting the puerperium.
2. Chemical composition of spermatozoa.
3. Anaerobic method for sperm metabolism.

B. Write short account on:

1. Equilibration time during semen preservation.
2. How to evaluate the quality of bovine embryos.
3. Short- term liquid storage of semen.

C.

1. **Design** a time schedule for embryo transfer steps in cattle.
2. **How** can you deal with uterine prolapse in cow?

Theriogenology 2016

Please answer the following questions

1. **How** can you make clinical assessment of a normal parturient cow 15th day postpartum?
2. **Discuss** RFM in mare

Comment on

1. Short term liquid storage of semen at ambient temperature
2. Cold shock (microscopic picture and prevention of such problem)

Write on

1. Cryoprotectants (def., types, functions and side effects)
2. Morphological and biochemical characteristic of sperm head

Discuss briefly

1. Evaluation of post-thawing sperm motility
2. Functions of seminal plasma

1. **Mention** advantages and disadvantages of surgical and nonsurgical embryos recovery
2. Amputation of the everted uterus in cow (Indications & procedure)

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